Title V Federal Operating Permit Evaluation SFPP, Bradshaw Terminal 6/17/98

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8411 Jackson RoadSACRAMENTO METROPOLITANSacramento, CA 95826 AIR QUALITY

MANAGEMENT DISTRICT

TITLE V FEDERAL OPERATING PERMIT EVALUATION

APPLICATION NO.: 96-04
DATE: 6/17/98
ISSUING ENGINEER: Jorge DeGuzman

FACILITY INFORMATION:

FACILITY NAME: SFPP, L.P. Bradshaw Terminal

LOCATION: 2901 Bradshaw Road

Sacramento, CA 95827

MAILING ADDRESS: 1100 Town and Country Road

Orange, CA 92868

RESPONSIBLE OFFICIAL: W.M. White, Vice President Operations

CONTACT PERSON: Terry D. Bailey, (916) 448-5198

FACILITY DESCRIPTION:

SFPP, L.P. (SFPP), Bradshaw Terminal was constructed and placed into service in 1957. Bradshaw Terminal receives refined fuels from Concord, California via SFPP's 10" and 12" pipelines. These fuels are held temporarily and then loaded into tanker trucks to re-supply surrounding gas stations, businesses, and homes. Additional product is pumped out to McClellan Air Force Base in 3" and 4" pipelines. There are also 3" and 4" lines serving Mather Air Force Base, which is closed. The material handled and dispensed at Bradshaw Terminal is not owned by SFPP and SFPP only handles the amount of material demanded by its facilities' surrounding communities.

The predominant air pollutant emanating from the facility is Reactive Organic Compounds (ROCs). The main sources of these emissions, all characterized as fugitive emissions, are the petroleum storage tanks, petroleum loading racks, and incremental emissions from pipe fittings, sample house drains, etc.

Refined petroleum product batches arrive at the terminal via SFPP pipelines. For example, a batch of diesel will typically follow a batch of jet fuel or gasoline in the pipeline. The separation point of the batches is determined by knowledge of rate of flow of the product, and, color and gravitometer monitoring of the pipeline. Once the batch arrives at the station, valves at the manifold area are configured to send the batch to the appropriate tanks. The activity of segregating batches is becoming more complicated with increasingly numerous grades and formulas of refined products all requiring segregation. As an example, gasoline product types

would include: reformulated with MTBE, reformulated without MTBE, oxygenated with MTBE, oxygenated without MTBE, reformulated and oxygenated with MTBE, reformulated and oxygenated without MTBE, as well as basic gasoline products divided into unleaded regular, mid-grade, and premium. In addition, diesel fuel is also batched as EPA low-sulfur, EPA off-highway and CARB low aromatic. All of these products must be kept separate creating difficulty with tank scheduling.

Batch sizes average approximately 10,000 barrels with a maximum incoming pipeline rate of approximately 2,800 and 4,200 barrels per hour for the 10" and 12" lines, respectively. Once the product is stored in its specified tank, tanker trucks arrive to load product for distribution. During loading, the vapors from the empty tanker trucks are pushed through vapor piping to the terminal's vapor processing system.

The vapor processing system condenses and injects the condensate into the terminal's storage tanks. The balance of the vapors are destroyed in the thermal oxidizer unit.

INSIGNIFICANT EMISSIONS UNIT INFORMATION:

Tanks B-6, B-7, These tanks store diesel fuel and are exempt from permitting B-12, B-13, B-16 pursuant to Rule 201, Section 117. They are also exempt

B-17, A-6 & A-7 from Rule 446.

EXEMPT TANKS

Tank I.D.	Tank Description	Diameter (ft)	Height (ft)	Capacity (gal)	TVP (psia)	SMAQMD Permit #
B-6	Cone Roof (fixed)	42.5	40	315,000	0.01	None
B-7	Cone Roof (fixed)	30	40	210,000	0.01	None
B-12	Cone Roof (fixed)	50	48	705,600	0.01	None
B-13	Cone Roof (fixed)	42.5	40	420,000	0.01	None
B-16	Cone Roof (fixed)	39	48	420,000	0.01	None
B-17	Internal floating	50	48	706,000	0.01	None
	Roof					
A-6	Fixed Roof	8	28.3	10,653	0.03	None
A-7	Fixed Roof	n/a	n/a	4,000	0.03	None

MISCELLANEOUS EXEMPT EQUIPMENT

Equipment	Basis for Exemption
Vehicles	Rule 201, §111.1 Vehicles used to transport
	passengers or freight.
Lawn Mower	Rule 201, §112.1 IC engine <50 hp
Weed Eater	Rule 201, §112.1 IC engine <50 hp
Blower	Rule 201, §112.1 IC engine <50 hp
Chainsaw	Rule 201, §112.1 IC engine <50 hp
Pump	Rule 201, §112.1 IC engine <50 hp
High Pressure Washer	Rule 201, §112.1 IC engine <50 hp
Diesel Fueld Heater	Rule 201, §112.2 <1 MMBtu heat input
Foam Trailer	Rule 201, §112.1 IC engine <50 hp
Air Conditioner	Rule 201, §115 Cooling system
Propane Starter	Rule 201, §112.2 <1 MMBtu heat input
Architectural Coating	Rule 201, §118.2 Use of less than 1 gallon/day
Laboratory	Rule 201, §120 Used only for chemical or
	physical analysis and bench scale test
Sump	Rule 201, §122 Emissions are below 2 lb/day

Oily Water Separator Rule 201, §122 Emissions are below 2 lb/day Routine Maintenance Rule 201, §121 Not involving changes to any equipment under permit

SIGNIFICANT EMISSIONS UNIT INFORMATION:

STORAGE TANKS

Generally, gasoline, jet kerosene, diesel fuel , and MTBE will be stored at the Bradshaw facility. Considering changing demand and various product types, a worst case scenario (in terms of VOC emissions) will be that gasoline is stored in all tanks except cone roof tanks with no floating roof (fixed roof tanks). In those tanks, the worst case will be the storage of jet kerosene fuel, which has a vapor pressure of 0.01 psia.

EXTERNAL FLOATING ROOF TANKS

Tank I.D.	Tank Seals		Height (ft)	Capacity (gal)		~
B-1	1) Mechanical Shoe 2) Rim Mounted Wiper Seal	100	40	2,318,400	5.39	1387
B-2	1) Mechanical Shoe 2) Rim Mounted Wiper Seal	100	40	2,310,000	5.39	1388
B-3	1) Mechanical Shoe 2) Rim Mounted Wiper Seal	100	40	2,314,200	1.35	1389
B-4	1) Mechanical Shoe 2) Rim Mounted Wiper Seal	100	40	2,310,000	1.35	1390
B-5	1) Vapor Mounted Resilient 2) Rim Mounted Wiper Seal	52	40	630,000	5.39	1391
B-8	1) Mechanical Shoe 2) Rim Mounted Wiper Seal	73.3	40	1,251,600	5.39	11845

INTERNAL FLOATING ROOF TANKS

Tank I.D.	Tank Seals	Diameter (ft)	Height (ft)	Capacity (gal)	TVP (psia)	SMAQMD Permit #
	Vapor Mounted Resilient	30	40	210,000	5.39	4961
	Vapor Mounted Resilient	76.5	40	1,575,000	5.39	1394
	Vapor Mounted Resilient	68.5	40	1,260,000	5.39	1395
	Vapor Mounted Resilient	56	48	840,000	5.39	1396
	Vapor Mounted Resilient	56	48	840,000	5.39	1397

LOADING RACK

Vapors displaced from loading the tanker trucks are typically transferred to a vapor holding tank and then to a John Zink thermal incinerator where emissions are reduced to below 0.08 pounds of non-methane hydrocarbons per 1,000 gallons of organic liquids transferred. There are three loading racks owned by SFPP at the facility (SMAQMD P/Os #3074, 9265, and 9266). The vapors from the loading racks are collected and controlled by one of the three operating modes described below (see Fig 1):

- 1) Normal Mode: Vapors from the trucks go to the vapor holding tank, then to the Edwards refrigeration vapor recovery unit. Residual vapors are processed through the thermal oxidizer.
- 2) By-pass Mode: Vapors from trucks go to the vapor holding tank, then to the thermal oxidizer.
- 3) Direct Mode: Vapors from the truck go directly to the thermal oxidizer.

VAPOR RECOVERY UNIT

The vapor processing system at this facility (P/O #13121) includes:

- 1) Exhaust system venting three tank truck loading racks (all three modes)
- 2) Organic vapor holding tank, 40,000 cubic feet capacity (normal and bypass modes)
- 3) Organic vapor condensing unit, Edwards, model # DEC-3600 (normal mode)
- 4) Organic vapor thermal oxidizer, John Zink, Model # S76300, 800 cfm capacity (all three modes)

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ALTERNATE OPERATING SCENARIOS:

1. Tanks B-1 through B-5, B-8 through B-11, B-14, B-15 and B-17 may also store organic liquids with low vapor pressure. When storing liquids with a vapor pressure below 1.5 psia, the tank(s) will be exempt from the requirements of SMAQMD Rule 446. When storing liquids with a vapor pressure below 0.5 psia, the tank(s) will be exempt from the requirements of SMAQMD Rules 446 and 447

EMISSIONS:

Actual emissions for 1995 were as follows (see Appendix A for calculations):

1995 Emissions (in tons/year)

Equipment	VOCs	Single HAP (MTBE)	Total HAPs
Tank B-1	0.61	0.06	0.03
Tank B-2	0.55	0.06	0.03
Tank B-3	0.00	0.00	0.00
Tank B-4	0.01	0.00	0.00
Tank B-5	5.69	0.58	0.28
Tank B-6	0.17	0.00	0.00
Tank B-7	0.09	0.00	0.00
Tank B-8	7.95	0.81	0.40
Tank B-9	0.86	0.00	0.00
Tank B-10	1.01	0.10	0.05

Tank B-11	0.94	0.10	0.05
Tank B-12	0.24	0.00	0.00
Tank B-13	0.13	0.00	0.00
Tank B-14	0.84	0.09	0.04
Tank B-15	0.18	0.00	0.00
Tank B-16	0.10	0.00	0.00
Tank B-17	0.00	0.00	0.00
Vapor Recovery Unit	0.77	0.07	0.03
Total Emissions	20.14	0.91	1.87

Combustion Emissions from the Thermal Oxidizer:

CO emissions from the thermal oxidizer are calculated from actual emissions data from a source test conducted on the unit on July 27, 1993 by VOC testing, Inc. Although the test was conducted mainly to certify compliance with the VOC emissions limit, NOx and CO were also monitored. The NOx emission factor was determined from data submitted by the manufacturer.

Normal Mode:

```
NOx = 0.0334 lbs per 1,000 gallons of gasoline processed CO = 0.00918 lbs per 1,000 gallons of gasoline processed
```

Therefore the maximum daily potential to emit for the thermal oxidizer can be calculated as follows (based on throughput limit):

```
NOx = 0.0334 \text{ lbs/1,000 gallons} * 2,231,000 \text{ gallons/day} = 74.5 \text{ lb/day}
CO = 0.00918 \text{ lbs/1,000 gallons} * 2,231,000 \text{ gallons/day} = 20.5 \text{ lb/day}
```

Actual annual throughput is approx. 165,947 million gal per year. Therefore annual emissions are:

```
NOx = 0.0334 \text{ lbs/1,000 gallons} * 167,028,000 \text{ gal/yr} = 2.8 \text{ Tons/yr} CO = 0.00918 \text{ lbs/1,000 gallons} * 167,028,000 \text{ gal/yr} = 0.8 \text{ Tons/yr}
```

Bypass Mode:

```
NOx = 0.0334 lbs per 1,000 gallons of gasoline processed CO = 0.1494 lbs per 1,000 gallons of gasoline processed
```

Therefore the maximum daily potential to emit for the thermal oxidizer, when operating in the bypass mode, can be calculated as follows (based on throughput limit). It should be noted however, that this is not the normal operating mode and it is used only when the condenser is not operational.

```
NOx = 0.0334 \text{ lbs/1,000 gallons} * 2,231,000 \text{ gallons/day} = 74.5 \text{ lb/day}

CO = 0.1494 \text{ lbs/1,000 gallons} * 2,231,000 \text{ gallons/day} = 333.3 \text{ lb/day}
```

Actual annual throughput is approx. 165,947 million gal per year. Therefore the maximum annual emissions, if the facility were to operate on bypass mode all year, would be as follows:

```
NOx = 0.0334 \text{ lbs/1,000 gallons} * 167,028,000 \text{ gal/yr} = 2.8 \text{ Tons/yr} CO = 0.1494 \text{ lbs/1,000 gallons} * 167,028,000 \text{ gal/yr} = 12.5 \text{ Tons/yr}
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APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS:

Facility-wide Requirements:

SMAQMD Rule 201 - General Permit Requirements - SIP approved on 7/13/87 (52 FR 26148):

Rule Description:

This rule provides an orderly procedure for the review of new sources of air pollution and of the modification and operation of existing sources through the issuance of permits.

Compliance Status:

SFPP has active permits for all sources that require permits.

SMAQMD Rule 202 - New Source Review - SIP approved on 6/19/85 (50 FR 25417):

Rule Description:

This rule sets the procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status:

SFPP has been reviewed pursuant to this rule and it has applied BACT where required. Offsets have not been triggered by this facility.

SMAQMD Rule 207 - Title V Federal Operating Permits - Approved on 8/4/95 (60 FR 39862):

Rule Description:

This rule sets forth the procedures for review, issuance and renewal of Title V operating permits.

Compliance Status:

SFPP has submitted a timely and complete Title V application, and is currently operating under an application shield.

SMAQMD Rule 602 - Breakdown Conditions: Emergency Variance - Approved on 12/05/84 (49 FR 47490):

Rule Description:

This rule specifies conditions and procedures for breakdowns and emergency variances.

Compliance Status:

SFPP is aware of this requirement and it is prepared to notify the district in case of a breakdown.

Equipment-specific Requirements:

Tanks B-1 through B-4:

SMAQMD Rule 202 - New Source Review - SIP approved on 6/19/85 (50 FR 25417):

Rule Description:

This rule sets the procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status:

These storage tanks were built prior to 1973 and did not trigger New Source Review. The permits to operate for these tanks were issued on June 25, 1973.

SMAQMD Rule 446 - Storage of Petroleum Products - Latest SIP approval 9/16/94 (59 FR 47544):

Rule Description:

This rule sets the design specifications for storage tanks so as to minimize ROC emissions.

Compliance Status:

- § 301 -- Each tank has a capacity is excess of 40,000 gallons. The use of external floating roofs with primary (mechanical shoe) and secondary (rim mounted wiper) seals as vapor-loss control devices, meets the requirements of this section. These tanks could store gasoline, diesel fuel or jet kerosene fuel, all of which have a true vapor pressure of less than 11 psia.
- \S 314 -- The equipment was originally designed and built to meet these specifications.
- \S 316 -- The equipment was originally designed and is currently maintained to meet the requirements for welded tanks with metallic shoe seals as specified in this section.
- \S 401 -- The tanks are available for inspection by the district upon request. The inspectors should provide prior notification and meet entry requirements (e.g., safety).
- \S 403 -- The applicant will submit to the District a maintenance plan at least 30 days prior to the anticipated maintenance.
- \S 501 -- The facility maintains accurate records of liquid stored, true vapor pressure ranges. Although the facility does maintain actual storage temperature, the District's ambient temperature record satisfies this requirement.
- \S 502 -- Compliance with the rule requirements is verified by the test methods specified in this section.

SMAQMD Permits to Operate # 1387-90:

The conditions in these permits to operate are not federally enforceable.

Tank B-5:

SMAQMD Rule 202 - New Source Review - SIP approved on 6/19/85 (50 FR 25417):

Rule Description:

This rule sets the procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status:

This storage tank was built prior to 1973 and did not trigger New Source Review. The permit to operate for this tank was issued on June 25, 1973.

SMAQMD Rule 446 - Storage of Petroleum Products - Latest SIP approval 9/16/94 (59 FR 47544):

Rule Description:

This rule sets the design specifications for storage tanks so as to minimize ROC emissions.

Compliance Status:

- § 301 -- This tank has a capacity is excess of 40,000 gallons. The use of an external floating roof with primary (vapor mounted resilient) and secondary (rim mounted wiper) seals as vapor-loss control devices, meets the requirements of this section. This tank could store gasoline, diesel fuel or jet kerosene fuel, all of which have a true vapor pressure of less than 11 psia.
- \S 314 -- The equipment was originally designed and built to meet these specifications.
- \S 317 -- The equipment was originally designed and is currently maintained to meet the requirements for resilient toroid seals as specified in this section.
- \S 401 -- The tanks are available for inspection by the district upon request. The inspectors should provide prior notification and meet entry requirements (e.g., safety).
- \S 403 -- The applicant will submit to the District a maintenance plan at least 30 days prior to the anticipated maintenance.
- \S 501 -- The facility maintains accurate records of liquid stored, true vapor pressure ranges. Although the facility does maintain actual storage temperature, the District's ambient temperature record satisfies this requirement.
- \S 502 -- Compliance with the rule requirements is verified by the test methods specified in this section.

SMAQMD Permit to Operate # 1391:

The conditions in this permit to operate are not federally enforceable.

Tank B-8:

SMAQMD Rule 202 - New Source Review - SIP approved on 6/19/85 (50 FR 25417):

Rule Description:

This rule sets the procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status:

This storage tank was built prior to 1973 and did not trigger New Source Review. This tank was originally equipped with a vapor mounted resilient

primary seal. In 1995, the vapor mounted resilient seal was replaced with a mechanical shoe seal. Since the replacement resulted in an emissions decrease, BACT was not triggered.

SMAQMD Rule 446 - Storage of Petroleum Products - Latest SIP approval 9/16/94 (59 FR 47544):

Rule Description:

This rule sets the design specifications for storage tanks so as to minimize ROC emissions.

Compliance Status:

- § 301 -- This tank has a capacity is excess of 40,000 gallons. The use of external floating roofs with primary (mechanical shoe) and secondary (rim mounted wiper) seals as vapor-loss control devices, meets the requirements of this section. This tank could store gasoline, diesel fuel or jet kerosene fuel, all of which have a true vapor pressure of less than 11 psia.
- $\S 314$ -- The equipment was originally designed and built to meet these specifications.
- \S 316 -- The equipment was originally designed and is currently maintained to meet the requirements for welded tanks with metallic shoe seals as specified in this section.
- § 401 -- The tank is available for inspection by the district upon request. The inspectors should provide prior notification and meet entry requirements (e.g., safety).
- \S 403 -- The applicant will submit to the District a maintenance plan at least 30 days prior to the anticipated maintenance.
- \S 501 -- The facility maintains accurate records of liquid stored, true vapor pressure ranges. Although the facility does maintain actual storage temperature, the District's ambient temperature record satisfies this requirement.
- \S 502 -- Compliance with the rule requirements is verified by the test methods specified in this section.

SMAQMD Permits to Operate # 11845:

Conditions #1 and #3 in this permit to operate are not federally enforceable. Conditions #2, #4 and #5 are federally enforceable. The applicant is currently in compliance with these requirements.

Tanks B-9 through 11, B-14 and B-15: SMAQMD Rule 202 - New Source Review - SIP approved on 6/19/85 (50 FR 25417):

Rule Description:

This rule sets the procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status:

All these tanks were constructed prior to 1973. The Permit to Operate applications were received on 5/16/73. SFPPP submitted an Authority to Construct application on 7/20/76 for the addition of an internal floating roof for Tank B-9.The NSR rule was adopted on 1-1-77 thus not applicable to this modification. Furthermore, the change did not result on an emissions increase.

SMAQMD Rule 446 - Storage of Petroleum Products - Latest SIP approval 9/16/94 (59 FR 47544):

Rule Description:

This rule sets the design specifications for storage tanks so as to minimize ROC emissions.

Compliance Status:

- § 301 -- Each tank has a capacity is excess of 40,000 gallons. The use of an internal floating roof with a vapor mounted resilient toroid seal as vapor-loss control device meets the requirements of this section. Each tank could store gasoline, diesel fuel or jet kerosene fuel, all of which have a true vapor pressure of less than 11 psia.
- $\S \ 312$ -- The equipment was originally designed and built to meet these specifications.
- \S 401 -- The tanks are available for inspection by the district upon request. The inspectors should provide prior notification and meet entry requirements (e.g., safety).
- \S 403 -- The applicant will submit to the District a maintenance plan at least 30 days prior to the anticipated maintenance.
- \S 501 -- The facility maintains accurate records of liquid stored, true vapor pressure ranges. Although the facility does maintain actual storage temperature, the District's ambient temperature record satisfies this requirement.
- § 502 -- Compliance with the rule requirements is verified by the test methods specified in this section.

 SMAQMD Permits to Operate # 4961 and 1395-7:

The conditions in these permits to operate are not federally enforceable.

Truck Loading (Loading Racks):

SMAQMD Rule 202 - New Source Review - SIP approved on 6/19/85 (50 FR 25417):

Rule Description:

This rule sets the procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status:

The loading rack permits were modified in 1989 and did not trigger BACT or offsets.

SMAQMD Rule 447 - Organic Liquid Loading - Latest SIP approval 9/16/94 (59 FR 47544):

Rule Description:

The purpose of this rule is to limit emissions from the loading of organic liquids. The requirements of this rule include maintaining the system leak free and vapor tight, scheduled maintenance requirements, and a vapor recovery criteria of 0.08 lb/1,000 gal.

Compliance Status:

- \S 301 -- The loading facility is being vented to a CARB certified vapor recovery unit. Therefore, it complies with the requirements of this section.
- § 302 -- Annual source tests verify that the vapor recovery unit is emitting less than $0.08\ lb\ VOCs/1,000\ gallons\ transferred.$
- § 304 -- The equipment is leak free and vapor tight.
- \S 501 -- The test methods specified in this section are used to determine compliance with the requirements of this rule.
- § 502 -- Testing results are being kept for at least two years.
- 40 CFR, Part 60.500 -- NSPS for Bulk Gasoline Terminals:

Rule Description:

This regulation affects all loading racks at a gasoline terminal which deliver liquid product into gasoline tank trucks. It applies to new and modified facilities and requires the application of best demonstrated technology.

During mid-1989, SFPP modified the loading racks by adding more loading spots and thereby decreasing the amount of time required to load a truck. Although this change did not result in an increase in daily throughput, it did increase the potential hourly throughput as well as potential hourly ROC emissions. Therefore, the changes qualified as a modification pursuant to 40 CFR, Part 60.14 and SFPP became subject to 40 CFR, Part 60, Subpart XX (40 CFR, Part 60.500).

Compliance Status:

- § 60.502(a): This facility is equipped with a vapor collection system designed to collect the TOC vapors displaced from tank trucks during product loading.
- \S 60.502(b): The vapor processing system was in place prior to becoming an affected facility thus this section does not apply.
- § 60.502(c): TOC emissions from the system are well below the 80 mg/l limit. Source tests have shown a TOC emission rate of less than 1 mg/l.
- § 60.502(d): The vapor collection system is designed according to this section.
- § 60.502(e-g): Liquid product is loaded only into vapor-tight gasoline tank trucks equipped with vapor collection equipment compatible with the

terminals vapor collection system.

- § 60.502(h): The vapor collection and liquid loading is designed and operated to prevent gauge pressure in the delivery tank from exceeding 450 mm (17.7 inches) of water during product loading.
- § 60.502(I): No pressure vent in the vapor collection system begins to open at a system pressure of less than 450 mm (17.7 inches) of water.
- § 60.502(j): All equipment associated with loading is maintained to be leak free and vapor tight.
- § 60.503: Source testing is conducted in accordance with this section.
- § 60.505: All records are maintained in accordance with this section.

SMAQMD Permits to Operate # 3074, 9265, & 9266:

Condition #1 is not federally enforceable. All other conditions of these permits are federally enforceable since they are requirements of Rule 447, a SIP approved rule. The applicant is currently in compliance with all the conditions of Permits to Operate #3074, 9265, and 9266.

Streamlining Permit Conditions

Case 1:

Rule 447 and conditions #2 & 3 of SMAQMD permits #3074, 9265, and 9266 require that the equipment be leak free and vapor tight. Leak free & vapor tight are defined as follows:

Leak Free:

Rule 447: "a liquid leak of less than three drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed one fluid ounce, averaged over three disconnects."

Condition #2: "less than 3 drops per minute or disconnect losses not exceeding 0.34 fluid ounces per disconnect. Testing shall be conducted in accordance with California Air Resources Board Method 2-6."

Vapor Tight:

Rule 447: "A concentration of total organic compounds , measured one (1) cm from any source, which does not exceed 10,000 ppm (expressed as methane) above background, as determine by a method specified in Section 501.3." (Section 501.3 requires the use of EPA Reference Test Method 21.

Condition #3: "less than 100 percent of the lower explosive limit at a distance of 1 inch from the source. Testing shall be conducted in accordance with California Air Resources Board Method 2-6."

The permit conditions (conditions #2 & 3) were written before "leak free" and "vapor tight" were defined in Rule 447. Now that Rule 447 has definitions for "leak free" and "vapor tight", the permit conditions should be revised to reflect the rule's definition.

Proposed conditions:

- *. All equipment associated with the loading facility shall be maintained to be leak free. Leak free is defined as a liquid leak of less than three drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed one fluid ounce per disconnect, averaged over three disconnects. [Rule 447, Section 304 and SMAQMD Permits #9265, 9266, and 3074, Condition #2]
- *. All equipment associated with the loading facility shall be maintained to be vapor tight. Vapor tight is defined as a concentration of total organic compounds, measured one centimeter from any source, which does not exceed 10,000 ppm (expressed as methane) above background, as determined by EPA Reference Method 21. [Rule 447, Section 304 and SMAQMD Permits #9265, 9266, and 3074, Condition #3]

Case 2:

Title 17, Section 94004 of the California Code of Regulations requires that no delivery vessel (cargo tanker truck) be loaded at a gasoline terminal unless a valid State of California decal, issued by the California Highway Patrol upon verification that the cargo tank complies with all requirements, is displayed on the cargo tank.

- 40 CFR, Part 60.502(e) limits the loading of liquid product into vapor-tight gasoline tank trucks only and in accordance with the following procedure:
- 1. Owner/operator shall obtain the vapor tightness documentation described in §60.505(b) for each tank truck.
- 2. The tank identification number shall be recorded as each tank truck is loaded.
- 3. Notify the owner/operator of each non-vapor tight tank truck loaded within 3 weeks after loading has occurred.
- 4. The terminal owner/operator shall take steps assuring that the non-vapor tight tank trucks are not reloaded at the facility until vapor tightness documentation is obtained.
- 5. Alternate procedures to those described above may be used upon application to, and approval by , the Administrator.

Discussion:

Under the California program, trucks are tested and certified annually. Certified trucks must display a certification decal. Only trucks displaying a valid (not expired) certification decal can be loaded. This is more stringent than 40 CFR, Part 60.502(e) which allows the owner/operator of a terminal up to three weeks to verify if a tank truck's vapor tightness certification is valid.

Proposed conditions:

* Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks with a valid State of California decal certifying that the tank truck complies with all certification requirements including annual certification test. [40 CFR, Part 50.502(e) - Streamlined]

APC Truck Loading -- Vapor Recovery Unit

SMAQMD Rule 202 - New Source Review - SIP approved on 6/19/85 (50 FR 25417):

Rule Description:

This rule sets the procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status:

The vapor recovery unit was modified in 1993. However, BACT and offsets were not triggered because the modification resulted in an emissions decrease. The permit was also revised in March, 1998 to clarify the source testing requirements

SMAQMD Permit to Operate # 13121:

All the conditions of this permit are federally enforceable since they are requirements of SIP approved rules (rules 202, 447, and 602). The applicant is in compliance with all the conditions of Permit to Operate # 13121.

PERMIT SHIELDS:

SFPP is requesting two permit shields. One to clarify the fact that when emptying a floating roof tank, the roof is not expected to be in contact with the liquid once the legs are landed, and the other to clarify that the vapor collection system can operate under any one of the three permitted modes and SFPP's decision to permanently not use one of the modes is not a modification.

Floating Roof Tanks:

Section 311 of Rule 446 states that all floating roofs must rest on the surface of the liquid contents. This statement was written to define a floating roof and not intended to imply that the roof must, at all times, rest on the surface of the liquid. Tanks need to be emptied regularly for product changes such as winter/summer gasoline formulations or gasoline grade changes. Each time a floating roof tank is emptied, the roof rests on the liquid surface up until the point where the roof's legs reach the bottom of the tank (approximately 6' feet from the bottom). From that point on, the liquid level continues to drop, creating a vapor space between the liquid and the roof. The following language from Volatile Organic Liquid Storage Vessels NSPS (40 CFR, Part 60, Subpart K) will be added to the permit to clarify Section 311 of Rule 446.

The floating roof of an external floating roof tank or internal roof of an internal floating roof tank shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible without creating a safety hazard. [Rule 446, §311 and Rule 207, § 307]

Vapor Recovery Unit:

The gasoline vapors from the loading racks are treated by a John Zink vapor incinerator which is annually tested to ensure compliance with the 0.08 1b/1000 gallon limit. The system can operate under any of the three permitted modes (normal, bypass, and direct modes) and must be tested in the most frequently used mode annually and every two years in any other

mode used during the last two calendar years.

The Permit to Operate does not prevent the Terminal from operating (or not operating) indefinitely under any of the three modes. SFPP has decided to permanently discontinue operating in the normal mode (recovering product by condensing vapors and incinerating residual vapors). However, now that SFPP no longer operates under normal mode, SFPP wishes to physically remove the refrigeration unit without triggering NSR.

Rule 202, Section 222 defines modification as any physical change which for an emissions unit would necessitate a change in permit conditions, is not specifically limited by a permit condition, or results in an increase in emissions not subject to an emissions limitation.

Although the removal of the refrigeration unit could be construed as a physical change to the emissions unit, it would not necessitate a change in permit conditions, the permit currently allows for operating (or not operating) in any of the three modes, and will not result in an emissions increase (the unit is already not operating in normal mode). Therefore, removal of the refrigeration unit is not a modification pursuant to Rule 202, Section 222.

The following clarification is proposed:

The permanent cessation of operation in normal mode (vapors from tank truck loading are stored in the vapor holder, then processed by the vapor condensing unit, with effluent from the refrigeration unit being treated by the vapor incinerator) and physical removal of the Edwards refrigeration system shall not constitute a modification pursuant to Rule 202, Section 222. [Rule 207, §307]

FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

The requirements specified under this section are enforceable by the District and the U.S. EPA.

TITLE V PERMIT MODIFICATIONS AND RENEWAL

- 1. The owner or operator of a stationary source shall submit to the Air Pollution Control Officer a complete Title V permit application for renewal no later than 12 months prior to the expiration date of the Title V permit. [Rule 207, $\S301.4$]
- 2. The owner or operator of a stationary source shall submit to the Air Pollution Control Officer a complete Title V permit application for minor Title V permit modification. The application shall be submitted after receiving any required preconstruction permit from the District and before commencing operation associated with the Minor Title V permit modification. [Rule 207, §301.6]
- 3. The owner or operator of a stationary source shall submit to the Air Pollution Control Officer a complete Title V permit application for Significant Title V permit modification. The application shall not be submitted prior to receiving any required preconstruction permit from the District but no later than 12 months after commencing an operation associated with the Significant Title V permit modification. Where an existing federally enforceable Title V permit condition would prohibit such

change in operation or the stationary source is not required to obtain a preconstruction permit, the owner or operator must obtain a Title V permit modification before commencing operation. [Rule 207, §301.7]

- 4. The applicant shall submit to the Air Pollution Control Officer timely updates to the Title V application as new requirements become applicable to the source. [Rule 207, §302.1]
- 5. The applicant shall submit to the Air Pollution Control Officer any additional information necessary to correct any incorrect information in the Title V permit application upon becoming aware of such incorrect submittal or if the applicant is notified by the Air Pollution Control Officer of such incorrect submittal. [Rule 207, §302.2]
- 6. The applicant shall submit to the Air Pollution Control Officer any additional information relating to the Title V application within 30 days if such information is requested in writing by the Air Pollution Control Officer. [Rule 207, §302.3]
- 7. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted and the stationary source complies with subsections 303.1a, b, c, and d of Rule 207, in which case the existing Title V permit will remain in effect until the Title V permit renewal has been issued or denied. [Rule 207, §303.2]
- 8. Any Title V application form, report, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [Rule 207, §304]
- 9. This Title V permit shall have a 5-year fixed term from the date of issuance. The Title V permit shall have a new 5-year fixed term from the date of final action on reopening if the responsible official chooses to submit to the District a complete Title V application for renewal upon reopening of the Title V permit pursuant to Sections 411 or 412 of Rule 207 and the Title V permit is renewed according to the administrative procedures listed in Sections 401 through 408 of Rule 207. [Rule 207, §306]

COMPLIANCE

- 10. The permittee must comply with all conditions of the Title V permit. [Rule 207, $\S305.1(k)(1)$]
- 11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the Title V permit. [Rule 207, $\S305.1(k)(2)$]
- 12. This Title V permit may be modified, revoked, reopened, and reissued, or terminated for cause. [Rule 207, §305.1(k)(3)]
- 13. The permittee shall furnish to the Air Pollution Control Officer, within a reasonable time, any information that the Air Pollution Control Officer may request in writing to determine whether cause exists for

modifying, revoking and reissuing, or terminating the permit pursuant to Section 411 of Rule 207 or to determine compliance with this Title V permit. Upon request, the permittee shall also furnish to the Air Pollution Control Officer copies of records required to be kept by conditions of this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. [Rule 207, $\S 305.1(k)(4)$]

- 14. Noncompliance with any Title V permit condition is grounds for Title V permit termination, revocation and reissuance, modification, enforcement action, or denial of the Title V permit renewal application. Any violation of the Title V permit shall also be a violation of Rule 207. [Rule 207, $\S 305.1(k)(5)$]
- 15. A pending Title V permit action or notification of anticipated noncompliance does not stay any permit condition. [Rule 207, §305.1(k)(6)]
- 16. This Title V permit does not convey any property rights of any sort, or any exclusive privilege. [Rule 207, $\S305.1(k)(7)$]
- 17. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Officer or an authorized representative to perform all of the following: [Rule 207, §413.1]
- A. Enter upon the stationary source's premises where this source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Title V permit;
- C. Inspect at reasonable times the stationary source, equipment (including monitoring and air pollution control equipment), practices, operations regulated or required under this Title V permit; and
- D. As authorized by the Federal Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the Title V permit conditions or applicable federal requirements.

REPORTS AND RECORDKEEPING

- 18. The permittee shall submit to the Air Pollution Control Officer and EPA (Air-3, U.S. EPA, Region IX) on an annual basis, unless required more frequently by additional applicable federal requirements such as Section 114(a)(3) and 504(b) (42 U.S.C. Sections 7414(a)(3) and 7661c(b)) of the Federal Clean Air Act, a certification of compliance by the responsible official with all terms and conditions contained in the Title V permit, including emission limitations, standards, or work practices. The compliance certification shall include the following: [Rule 207, §413.4]
- A. The identification of each term or condition of the Title V permit that is the basis of the certification;
- B. The compliance status and whether compliance was continuous or intermittent;
- C. The method(s) used for determining the compliance status of the source, currently and over the reporting period;
- D. Such other facts as the Air Pollution Control Officer may require to determine the compliance status of the source; and
- E. In accordance with Section 305f of Rule 207, a method for monitoring the compliance of the stationary source with its emissions limitations,

standards, and work practices.

- 19. The permittee shall report within 24 hours of detection any deviation from the Title V permit conditions not attributable to an emergency. In order to fulfill the reporting requirement of this condition, the permittee shall notify the Air Pollution Control Officer by telephone followed by a written statement describing the nature of the deviation from the permit conditions. [Rule 207, §501.3]
- 20. The permittee shall maintain on site, records of operation for all emissions units included in the Title V permit. The records shall contain all of the following information and shall be made available to the Air Pollution Control Officer and EPA for review upon request: [Rule 207, §502.1 & 502.2]
- A. Monitoring Records:
- I. The date, place as defined in the Title V permit, and time of sampling or measurements;
- II. The date(s) analyses were performed;
- III. The company or entity that performed the analyses;
- IV. The analytical techniques or methods used;
- V. The results of such analyses; and
- VI. The operating conditions existing at the time of sampling or measurement.
- B. Recordkeeping for process weight, fuel usage, and operating hours as specified in the Title V permit conditions.
- 21. All required monitoring data and support information must be kept by the stationary source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recording for continuous monitoring instrumentation, and copies of all reports required by the Title V permit. [Rule 207, §502.3]

RINGELMANN CHART

- 22. Except as otherwise provided in SMAQMD Rule 401, Section 100, a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour which is:
- A. As dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or B. Of such opacity as to obscure a human observer's view, or a certified calibrated in-stack opacity monitoring system to a degree equal to or greater than No. 1 on the Ringelmann Chart. [Rule 401, §301]

PARTICULATE MATTER

- 23. A person shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:
- A. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land.

- B. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;
- C. Other means approved by the Air Pollution Control Officer. [Rule 403, $\S 301$]
- 24. Except as otherwise provided in condition #23, a person shall not discharge into the atmosphere from any source particulate matter in excess of 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot). [Rule 404, §301]
- 25. A person shall not discharge into the atmosphere particulate matter from the burning of any kind of material containing carbon in a free or combined state, from any single source of emission whatsoever, combustion contaminants in any state or combination thereof exceeding in concentration at the point of discharge: 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot) of gas calculated to 12% of carbon dioxide (CO2) at standard conditions. [Rule 403, §302]

SULFUR COMPOUNDS

- 26. A person shall not discharge into the atmosphere from any single source of emission whatsoever sulfur compounds in any state or combination thereof exceeding in concentration at the point of discharge: sulfur compounds, calculated as sulfur dioxide (SO2): 0.2% by volume. [Rule 406, §301]
- 27. Except as otherwise provided in SMAQMD Rule 420, Section 100, a person shall not burn any gaseous fuel containing sulfur compounds in excess of 1.14 grams per cubic meter (50 grains per 100 cubic feet) of gaseous fuel, calculated as hydrogen sulfide at standard conditions, or any liquid fuel or solid fuel having a sulfur content in excess of 0.5% by weight. [Rule 420, §301]

ARCHITECTURAL COATING

- 28. Any coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs, shall meet the requirements of SMAQMD Rule 442. [Rule 442]
- 29. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained, or repaired. [Rule 442, §304]
- 30. A person shall not use volatile organic compounds for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [Rule 420, §301]

PERMIT SHIELD

31. The floating roof of an external floating roof tank or internal roof of an internal floating roof tank shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible without creating a safety hazard. [Rule 446, §311 and Rule 207, § 307]

32. The permanent cessation of operation in normal mode (vapors from tank truck loading are stored in the vapor holder, then processed by the vapor condensing unit, with effluent from the refrigeration unit being treated by the vapor incinerator) and physical removal of the Edwards refrigeration system shall not constitute a modification pursuant to Rule 202, Section 222. [Rule 202, §222 and Rule 207, §307]

EQUIPMENT BREAKDOWNS

- 33. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology based emission limitations if the following conditions are met: [Rule 207, §414]
- A. The affirmative defense of an emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- I. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- II. The permitted facility was at the time being properly operated; III. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the Title V permit;
- IV. The permittee submitted notice of the emergency to the Air Pollution Control Officer within 2 working days of the time when emissions limitations were exceeded due to the emergency. The notice must contain a description of the emergency, and corrective actions taken.
- B. In any enforcement proceedings, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 34. The permittee must notify the Air Pollution Control Officer of any occurrence which constitutes an emergency as defined in Section 212 of Rule 207 as soon as reasonably possible, but no later than one hour after its detection. If the emergency occurs when the Air Pollution Control Officer cannot be contacted, their report of the emergency shall be made at the commencement of the next regular working day. The notification shall identify the time, specific location, equipment involved, and to the extent known the cause(s) of the occurrence. [Rule 207, §501.2]
- 35. A person shall notify the Air Pollution Control Officer of any occurrence which constitutes a breakdown condition as soon as reasonably possibly, but no later than one hour after its detection. If the breakdown occurs when the Air Pollution Control Officer cannot be contacted, the report of breakdown shall be made at the commencement of the next regular working day. [Rule 602, §301.1]
- 36. The notification shall identify the time, specific location, equipment involved, and to the extent known the cause(s) of the occurrence. [Rule 602, $\S 301.2$]
- 37. Upon notification of the breakdown condition, the Air Pollution Control Officer shall investigate the breakdown condition in accordance with uniform written procedures and guidelines relating to logging of initial reports on appropriate forms, investigation, and enforcement follow-up. If the occurrence does not constitute a breakdown condition, the Air Pollution Control Officer may take appropriate enforcement action. [Rule 602, §301.3]
- 38. An occurrence which constitutes a breakdown condition, and which

persists only until the end of the production run or 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours) shall constitute a violation of any applicable emission limitation or restriction prescribed by these Rules and Regulations; however, the Air Pollution Control Officer may elect to take no enforcement action if the owner or operator demonstrates to his satisfaction that a breakdown condition exists and the following requirements are met: [Rule 602, §302.1]

- A. The notification required in condition #37 is made; and
- B. Immediate appropriate corrective measures are undertaken and compliance is achieved, or the process is shutdown for corrective measures before commencement of the next production run or within 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment for which the period shall be 96 hours). If the owner or operator elects to shut down rather than come into immediate compliance, (s)he must nonetheless take whatever steps are possible to minimize the impact of the breakdown within the 24 hour period; and
- C. The breakdown does not interfere with the attainment and maintenance of any national ambient air quality standard.
- 39. An occurrence which constitutes a breakdown condition shall not persist longer than the end of the production run or 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours), unless an emergency variance has been obtained. [Rule 602, §302.2]
- 40. If the breakdown condition will either require more than 24 hours to correct or persists longer than the end of the production run (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours) the owner or operator may, in lieu of shutdown, request the Air Pollution Control Officer to commence the emergency variance procedure set forth in Section 304 of Rule 602. [Rule 602, §302.2]
- 41. No emergency variance shall be granted unless the chairperson of the Hearing Board or other designated member(s) of the Hearing Board finds that: [Rule 602, §304.2]
- A. The occurrence constitutes a breakdown condition;
- B. Continued operation is not likely to create an immediate threat or hazard to public health or safety; and
- C. The requirements for a variance set forth in Health & Safety Code Sections 42352 and 42353 have been met;
- D. The continued operation in a breakdown condition will not interfere with the attainment or maintenance of the national ambient air quality standards.
- 42. At any time after an emergency variance has been granted, the Air Pollution Control Officer may request for good cause that the chairperson or designated member(s) reconsider and revoke, modify or further condition the variance. The procedures set forth in Rule 602, Section 304.1 shall govern any further proceedings conducted under this section. [Rule 602, §304.3]
- 43. An emergency variance shall remain in effect only for as long as necessary to repair or remedy the breakdown condition, but in no event after a properly noticed hearing to consider an interim or 90 day variance has been held, or 15 days from the date of the subject occurrence, whichever is sooner. [Rule 602, §304.4]

- 44. Within one week after a breakdown condition has been corrected, the owner or operator shall submit a written report to the Air Pollution Control Officer on forms supplied by the Air Pollution Control Officer describing the causes of the breakdown, corrective measures taken, estimated emissions during the breakdown and a statement that the condition has been corrected, together with the date of correction and proof of compliance. The Air Pollution Control Officer may, at the request of the owner or operator for good cause, extend up to 30 days the deadline for submittal of the report described in this subsection. [Rule 602, §401]
- 45. The burden of proof shall be on the owner or operator of the source to provide sufficient information to demonstrate that a breakdown did occur. If the owner or operator fails to provide sufficient information, the Air Pollution Control Officer shall undertake appropriate enforcement action. [Rule 602, §401.1]
- 46. Any failure to comply, or comply in a timely manner, with the reporting requirements established in Sections 301.1 and 401 of Rule 602 shall constitute a separate violation of this rule. [Rule 602, §401.2]
- 47. It shall constitute a separate violation of this rule for any person to file with the Air Pollution Control Officer a report which falsely, or without probable cause, claims that an occurrence is a breakdown condition. [Rule 602, §401.3]

TITLE VI REQUIREMENTS (OZONE DEPLETING SUBSTANCES)

- 48. Persons opening appliances containing CFCs for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR, \S 82.156.[40 CFR, Part 82, Subpart F]
- 49. Equipment used during the maintenance, service, repair, or disposal of appliances containing CFCs must comply with the standards for recycling and recovery equipment pursuant to 40 CFR, § 82.158. [40 CFR, Part 82, Subpart F]
- 50. Persons performing maintenance, service, repair or disposal of appliances containing CFCs must be certified by an approved technician certification program pursuant to 40 CFR, § 82.161. [40 CFR, Part 82, Subpart F]

PAYMENT OF FEES

- 51. The fee for (1) the issuance of an initial Title V operating permit, (2) the renewal and/or inspection of a Title V operating permit, (3) the modification of a Title V operating permit or (4) an administrative Title V permit amendment shall be based on the actual hours spent by the District staff in evaluating the application and processing the operating permit. The fee shall be assessed in accordance with the hourly rate established in Rule 301, Section 308.12. [Rule 207, Section 305.7 and Rule 301, Section 313]
- 52. After the provisions for granting permits as set forth in Rule 207 have been complied with, the permittee will be notified by mail of the fee due and payable and the date the fee is due. If the fee is not paid by the specified due date, the fee shall be increased by one half the amount and

the applicant/permittee shall be notified by mail of the increased fee. If the increased fee is not paid within 30 days after notice the application/permit will be canceled/revoked and the applicant/permittee will be notified by mail. [Rule 207, Section 305.7]

ACCIDENTAL RELEASES

53. Should the facility as defined in 40 CFR, §68.3, become subject to Part 68, the permittee shall submit a risk management plan (RMP) by the date specified in 40 CFR §68.10, and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by Rule 207, Section 413.4. [40 CFR, Part 68]

LOCAL (NON-FEDERALLY ENFORCEABLE) GENERAL REQUIREMENTS

LOCAL PERMIT RENEWAL:

- 1. The requirements outlined in this section pertain to the local permit to operate and are not part of the Title V permit.
- 2. Permits to operate issued to SFPP pursuant to SMAQMD Rule 201 (non-Title V permits to operate) shall be renewed annually on June 1 and upon payment of the permit renewal fee established pursuant to SMAQMD Rule 301.
- 3. The Air Pollution Control Officer and/or authorized representatives, upon the presentation of credentials shall be permitted:
- a. To enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this permit to operate, and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit to operate, and
- c. To inspect any equipment, operation, or method required in this permit to operate, and
- d. To sample emissions from the source or require samples to be taken.
- 4. The Air Pollution Control Officer shall review every permit to operate upon annual renewal, pursuant to Health and Safety Code Section 42301(c), to determine that permit conditions are adequate to ensure compliance with, and the enforceability of, District rules and regulations applicable to the article, machine, equipment, or contrivance for which the permit was issued. Applicable District rules and regulations shall include those which were in effect at the time the permit was issued or modified, or which have subsequently been adopted and made retroactively applicable to an existing article, machine, equipment, or contrivance, by the District Board of Directors. The Air Pollution Control Officer shall revise the conditions, if such conditions are not consistent, in accordance with all applicable rules and regulations.

EQUIPMENT OPERATION:

- 5. The equipment must be properly maintained.
- 6. This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, Chapter 3, of the Health and Safety Codes of the State of California or the Rules and Regulations of the Sacramento Metropolitan Air Quality Management District.

EQUIPMENT-SPECIFIC REQUIREMENTS

Below is a description of the emission units being addressed by this section of the Title V permit. The requirements specified in the following pages of this Title V permit are specific to the emission unit being referenced.

Tanks #B-1 through B-4 and B-8:

A. EQUIPMENT DESCRIPTION:

Tank #B-1 Capacity: 52,648 barrels Dimensions: 100' diameter x 40' high Roof Type: External floating roof Seal Type: Primary: Mechanical shoe Secondary: Rim mounted wiper seal

Content: Organic liquids

P/O No.: 1387 (for reference purposes only - not federally enforceable)

Tank #B-2 Capacity: 52,457 barrels Dimensions: 100' diameter x 40' high Roof Type: External floating roof Seal Type: Primary: Mechanical shoe Secondary: Rim mounted wiper seal

Content: Organic liquids

P/O No.: 1388 (for reference purposes only - not federally enforceable)

Tank #B-3 Capacity: 52,450 barrels Dimensions: 100' diameter x 40' high Roof Type: External floating roof Seal Type: Primary: Mechanical shoe Secondary: Rim mounted wiper seal

Content: Organic liquids

P/O No.: 1389 (for reference purposes only - not federally enforceable)

Tank #B-4 Capacity: 52,498 barrels Dimensions: 100' diameter x 40' high Roof Type: External floating roof Seal Type: Primary: Mechanical shoe Secondary: Rim mounted wiper seal

Content: Organic liquids

P/O No.: 1390 (for reference purposes only - not federally enforceable)

Tank #B-8 Capacity: 26,134 barrels Dimensions: 73.3' diameter x 40' high Roof Type: External floating roof Seal Type: Primary: Mechanical shoe Secondary: Rim mounted wiper seal

Content: Organic liquids

P/O No.: 11845 (for reference purposes only - not federally enforceable)

B. EQUIPMENT-SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS:

EQUIPMENT DESIGN AND OPERATION REQUIREMENTS:

1. Tanks B-1 through B-4 and B-8 shall not store organic liquids with a true vapor pressure of 11 psia or greater under actual storage conditions

- as determined by the methods specified in Rule 446, Section 502.4. [Rule 446, Section 311.2]
- 2. The closure device on floating roof tanks number B-1 through B-4 and B-8 shall meet the following requirements: [Rule 446, Section 311.1]
- A. Any secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal.
- I. For secondary seals installed after December 4, 1991 no gap between the tank shell and the seal shall exceed:
 - a. 0.15 cm (0.06 in)
 - b. 0.05 cm (0.02 in) for a cumulative length greater than 5% of the circumference of the tank.
- B. All openings in the roof, except pressure-vacuum valves, sampling wells, and gauging wells shall meet the following requirements:
- I. The opening shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tanks.
- II. The opening shall be equipped with a cover, seal or lid, which shall be closed at all times with no visible gaps, except when the opening is in use.
- C. Pressure-vacuum valves shall be set to within 10% of the maximum allowable working pressure of the roof.
- D. Solid sampling and gauging wells shall meet the following requirements:
- I. The well shall provide a projection below the liquid surface.
- II. The well shall be equipped with a cover, seal or lid, which shall be closed at all times with no visible gaps, except when the well is in use.
- E. Slotted sampling and gauging wells shall meet the following requirements:
- I. The well shall provide a projection below the liquid surface.

 II. The well shall be equipped with one of the following closure devices which shall be in place at all times except when the well is in use:
 - a. An internal float designed to minimize the gap between the float and the well, provided that the gap shall in no case exceed 1.3 cm ($\frac{1}{2}$ in).
 - b. A capped internal sleeve designed to minimize the gap between the sleeve and the well, provided that the gap shall in no case exceed 1.3 cm $(\frac{1}{2}$ in).
 - c. An internal sleeve with no visible gaps between the sleeve and the well and a cover, seal or lid on the well with no visible gaps.
- F. Any roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least nine-tenths of the area of the opening.
- G. The gap between sampling wells, gauging wells, and similar fixed projections through a floating roof, such as anti-rotational pipes, and the

- roof shall be added to the gaps measured to determine compliance of the secondary seal and in no case shall exceed $1.3~{\rm cm}$ ($\frac{1}{2}$ in).
- 3. The metallic shoe seals shall meet the following requirements: [Rule 446, Section 316]
- A. No gap between the tank shell and the primary seal shall exceed
- I. 3.8 cm (1-1/2 in).
- II. 1.3 cm ($\frac{1}{2}$ in) for a cumulative length greater than 10% of the circumference of the tank.
- III. $0.32~{\rm cm}$ $(1/8~{\rm in})$ for a continuous length of more than 10% of the circumference of the tank.
- IV. $0.32~{\rm cm}~(1/8~{\rm in})$ for a cumulative length greater than 40% of the circumference of the tank.
- B. No gap between the tank shell and the secondary seal shall exceed
- I. 1.3 cm (½ in)
- II. 0.32 cm (1/8 in) for a cumulative length greater than 5% of the circumference of the tank.
- C. The secondary seal shall allow easy insertion of probes up to 3.8 cm (1-1/2 in) in width in order to measure gaps in the primary seal.

MONITORING REQUIREMENTS:

- 4. The primary seal envelope shall be available for unobstructed inspection by the APCO on an annual basis at four locations selected along its circumference at random by the APCO. If the APCO detects one or more violations as a result of any such inspection, the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [Rule 446, Section 401]
- 5. For secondary seals installed after September 1, 1978, the primary seal envelope shall be made available for inspection by the APCO for its full length every 5 years after September 1, 1977, except that if the secondary seal is voluntarily removed by the owner or operator prior thereto, it shall be made available for such inspection at that time. The owner or operator shall provide notification to the APCO no less than 7 working days prior to voluntary removal of the secondary seal. [Rule 446, Section 402]
- 6. A result by any of the below listed test methods which shows non-compliance with any provision of the rule shall constitute a violation of the rule. [Rule 446, Section 502]
- A. CONTROL DEVICE: Control efficiency and emission rates of control devices shall be determined by EPA Method 25 or ARB Method 422.
- B. COLLECTION EFFICIENCY: Collection efficiency shall be determined using Environmental Protection Agency Guidelines for Developing Capture Efficiency Protocols, 55 Federal Register 26865, June 29, 1990.
- C. LEAK DETECTION: EPA Reference Method 21.
- D. VAPOR PRESSURE: Vapor pressure may be obtained from standard reference

texts or may be determined by ASTM D-2879-83 or ASTM D-323-82.

RECORDKEEPING AND REPORTING REQUIREMENTS:

7. The following records shall be continuously maintained for the most recent five year period and shall be made available to the Air Pollution Control Officer upon request.. [Rule 446, Section 501]

Frequency Information to be Recorded

Each time the tank is A. The type of product

filled with a different product

C. Maximum true vapor pressure of product

Daily (1) Actual storage temperature (ambient temperature may be used in this regard)

- (1) The District currently maintains daily ambient temperature date, which will satisfy this requirement without requiring the permittee to duplicate the effort.
- 8. A maintenance plan shall be submitted to the Air Pollution Control Officer at least thirty days prior to any periodic scheduled maintenance that may cause the emissions of volatile organic compounds. The plan shall state the amount and type of emission anticipated, method of calculating emissions, and the reason that the work is necessary, including the effect of not performing the maintenance. [Rule 446, Section 403]

Tank #B-5:

A. EQUIPMENT DESCRIPTION:

Tank #B-5 Capacity: 14,228 barrels Dimensions: 52' diameter x 40' high Roof Type: External floating roof

Seal Type: Primary: Vapor mounted resilient seal

Secondary: Rim mounted wiper seal

Content: Organic liquids

P/O No.: 1391 (for reference purposes only - not federally enforceable)

B. EQUIPMENT-SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS:

EQUIPMENT DESIGN AND OPERATION REQUIREMENTS:

- 1. Tank B-5 shall not store organic liquids with a true vapor pressure of 11 psia or greater under actual storage conditions as determined by the methods specified in Rule 446, Section 502.4 [Rule 446, Section 311.2].
- 2. The closure device on floating roof tanks number B-5 shall meet the following requirements:
- A. Any secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal.
- I. For secondary seals installed after December 4, 1991 no gap between the tank shell and the seal shall exceed:
 - a. 0.15 cm (0.06 in)
 - b. 0.05 cm (0.02 in) for a cumulative length greater than 5% of

the circumference of the tank.

- B. All openings in the roof, except pressure-vacuum valves, sampling wells, and gauging wells shall meet the following requirements:
- I. The opening shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tanks.
- II. The opening shall be equipped with a cover, seal or lid, which shall be closed at all times with no visible gaps, except when the opening is in use.
- C. Pressure-vacuum valves shall be set to within 10% of the maximum allowable working pressure of the roof.
- D. Solid sampling and gauging wells shall meet the following requirements:
- I. The well shall provide a projection below the liquid surface. II. The well shall be equipped with a cover, seal or lid, which shall be closed at all times with no visible gaps, except when the well is in use.
- E. Slotted sampling and gauging wells shall meet the following requirements:
- I. The well shall provide a projection below the liquid surface.

 II. The well shall be equipped with one of the following closure devices which shall be in place at all times except when the well is in use:
 - a. An internal float designed to minimize the gap between the float and the well, provided that the gap shall in no case exceed 1.3 cm ($\frac{1}{2}$ in).
 - b. A capped internal sleeve designed to minimize the gap between the sleeve and the well, provided that the gap shall in no case exceed 1.3 cm (½ in).
 - c. An internal sleeve with no visible gaps between the sleeve and the well and a cover, seal or lid on the well with no visible gaps.
- F. Any roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least nine-tenths of the area of the opening.
- G. The gap between sampling wells, gauging wells, and similar fixed projections through a floating roof, such as anti-rotational pipes, and the roof shall be added to the gaps measured to determine compliance of the secondary seal and in no case shall exceed 1.3 cm (½ in). [Rule 446, Section 311.1]
- 3. The resilient toroid seal shall meet the following requirements: [Rule 446, Section 317]
- A. There shall be no holes, tears, or openings which allow the emission of organic vapors through the secondary seal. There shall be no holes, tears, or openings in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, seal fabric and primary seal.
- B. For primary seals no gap between the tank shell and the seal shall exceed:

- I. 1.3 cm (½ in)
- II. 0.3 cm (1/8 in) for a cumulative length greater than 5% of the circumference of the tank.
- C. For secondary seals no gap between the tank shell and the secondary seal shall exceed:
- I. 1.3 cm ($\frac{1}{2}$ in)
- II. 0.3 cm (1/8 in) for a cumulative length greater than 5% of the circumference of the tank.
- D. The secondary seal shall allow easy insertion of probes up to $3.8\ cm\ (1-1/2\ in)$ in width in order to measure gaps in the primary seal.

MONITORING REQUIREMENTS:

- 4. The primary seal envelope shall be available for unobstructed inspection by the APCO on an annual basis at four locations selected along its circumference at random by the APCO. If the APCO detects one or more violations as a result of any such inspection, the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [Rule 446, Section 401]
- 5. For secondary seals installed after September 1, 1978, the primary seal envelope shall be made available for inspection by the APCO for its full length every 5 years after September 1, 1977, except that if the secondary seal is voluntarily removed by the owner or operator prior thereto, it shall be made available for such inspection at that time. The owner or operator shall provide notification to the APCO no less than 7 working days prior to voluntary removal of the secondary seal. [Rule 446, Section 402]
- 6. A result by any of the below listed test methods which shows non-compliance with any provision of the rule shall constitute a violation of the rule.
- A. CONTROL DEVICE: Control efficiency and emission rates of control devices shall be determined by EPA Method 25 or ARB Method 422.
- B. COLLECTION EFFICIENCY: Collection efficiency shall be determined using Environmental Protection Agency Guidelines for Developing Capture Efficiency Protocols, 55 Federal Register 26865, June 29, 1990.
- C. LEAK DETECTION: EPA Reference Method 21.
- D. VAPOR PRESSURE: Vapor pressure may be obtained from standard reference texts or may be determined by ASTM D-2879-83 or ASTM D-323-82. [Rule 446, Section 502]

RECORDKEEPING AND REPORTING REQUIREMENTS:

7. The following records shall be continuously maintained for the most recent five year period and shall be made available to the Air Pollution Control Officer upon request. [Rule 446, Section 501]

Frequency Information to be Recorded

Each time the tank is A. The type of product

filled with a different B. The date of initial filling with such product

product C. Maximum true vapor pressure of product
Daily (1) Actual storage temperature (ambient temperature may be used in this regard)

- (1) The District currently maintains daily ambient temperature date, which will satisfy this requirement without requiring the permittee to duplicate the effort.
- 8. A maintenance plan shall be submitted to the Air Pollution Control Officer at least thirty days prior to any periodic scheduled maintenance that may cause the emissions of volatile organic compounds. The plan shall state the amount and type of emission anticipated, method of calculating emissions, and the reason that the work is necessary, including the effect of not performing the maintenance. [Rule 446, Section 403]

Tanks #B-9 B-10, B-11, B-14, B-15:

A. EQUIPMENT DESCRIPTION:

Tank #B-9 Capacity: 4,797 barrels Dimensions: 30' diameter x 40' high Roof Type: Internal floating roof

Seal Type: Primary: Vapor mounted resilient seal

Content: Organic liquids

P/O No.: 4961 (for reference purposes only - not federally enforceable)

Tank #B-10 Capacity: 35,758 barrels Dimensions: 76'6" diameter x 48' high Roof Type: Internal floating roof

Seal Type: Primary: Vapor mounted resilient seal

Content: Organic liquids

P/O No.: 1394 (for reference purposes only - not federally enforceable)

Tank #B-11 Capacity: 28,703 barrels Dimensions: 68'6" diameter x 48' high Roof Type: Internal floating roof

Seal Type: Primary: Vapor mounted resilient seal

Content: Organic liquids

P/O No.: 1395 (for reference purposes only - not federally enforceable)

Tank #B-14 Capacity: 19,284 barrels Dimensions: 56' diameter x 48' high Roof Type: Internal floating roof

Seal Type: Primary: Vapor mounted resilient seal

Content: Organic liquids

P/O No.: 1396 (for reference purposes only - not federally enforceable)

Tank #B-15 Capacity: 19,254 barrels Dimensions: 56' diameter x 48' high Roof Type: Internal floating roof

Seal Type: Primary: Vapor mounted resilient seal

Content: Organic liquids

P/O No.: 1397 (for reference purposes only - not federally enforceable)

B. EQUIPMENT-SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS:

EQUIPMENT DESIGN AND OPERATION REQUIREMENTS:

1. Tanks B-9, B-10, B11, B14 and B-15 shall not store organic liquids with a true vapor pressure of 11 psia or greater under actual storage conditions as determined by the methods specified in Rule 446, Section 502.4 [Rule 446, Section 311.2].

MONITORING REQUIREMENTS:

- 2. A result by any of the below listed test methods which shows non-compliance with any provision of the rule shall constitute a violation of the rule. [Rule 446, Section 502]
- A. CONTROL DEVICE: Control efficiency and emission rates of control devices shall be determined by EPA Method 25 or ARB Method 422.
- B. COLLECTION EFFICIENCY: Collection efficiency shall be determined using Environmental Protection Agency Guidelines for Developing Capture Efficiency Protocols, 55 Federal Register 26865, June 29, 1990.
- C. LEAK DETECTION: EPA Reference Method 21.
- D. VAPOR PRESSURE: Vapor pressure may be obtained from standard reference texts or may be determined by ASTM D-2879-83 or ASTM D-323-82.

RECORDKEEPING AND REPORTING REQUIREMENTS:

7. The following records shall be continuously maintained for the most recent five year period and shall be made available to the Air Pollution Control Officer upon request.. [Rule 446, Section 501]

Frequency
Each time the tank is
filled with a different
product
Daily (1)

Information to be Recorded
A. The type of product
B. The date of initial filling with such product
C. Maximum true vapor pressure of product
Actual storage temperature (ambient temperature may be used in this regard)

- (1) The District currently maintains daily ambient temperature date, which will satisfy this requirement without requiring the permittee to duplicate the effort.
- 8. A maintenance plan shall be submitted to the Air Pollution Control Officer at least thirty days prior to any periodic scheduled maintenance that may cause the emissions of volatile organic compounds. The plan shall state the amount and type of emission anticipated, method of calculating emissions, and the reason that the work is necessary, including the effect of not performing the maintenance. [Rule 446, Section 403]

Loading Racks:

A. EQUIPMENT DESCRIPTION:

Loading Rack #1

Vapor Control System:

Gasoline vapors are vented to the condenser/Incinerator system.

P/O No.: 9265 (for reference purposes only - not federally enforceable)

Loading Rack #2

Vapor Control System:

Gasoline vapors are vented to the condenser/Incinerator system.

P/O No.: 9266 (for reference purposes only - not federally enforceable)

Loading Rack #3

Vapor Control System:

Gasoline vapors are vented to the condenser/Incinerator system.

P/O No.: 3074 (for reference purposes only - not federally enforceable)

B. FEDERALLY ENFORCEABLE REQUIREMENTS:

EQUIPMENT DESIGN AND OPERATION REQUIREMENTS:

- 1. SFPP shall not load organic liquids into any tank truck, trailer, or railroad tank car unless the loading facility is equipped with an ARB certified vapor collection and disposal system. [Rule 447, Section 301 and 40 CFR, Part 60.502(a)]
- 2. SFPP shall not transfer or permit the transfer of organic liquids into any tank truck, trailer or railroad tank car unless the emissions to the atmosphere do not exceed 0.08 pounds of VOC per one thousand (1,000) gallons of organic liquids transferred as determined by a method specified in condition 11. [Rule 447, Section 302 and 40 CFR, Part 60.502(c)]
- 3. All equipment associated with the loading facility shall be maintained to be leak free. Leak free is defined as a liquid leak of less than three drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed one fluid ounce per disconnect, averaged over three disconnects. [Rule 447, Section 304, 40 CFR, Part 60.502(j) and SMAQMD Permits #9265, 9266, and 3074, Condition #2]
- 4. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks with a valid State of California decal certifying that the tank truck complies with all certification requirements including annual certification test. [40 CFR, Part 60.502(e) Streamlined]
- 5. Loading of gasoline tank truck shall be made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. [40 CFR, Part 60.502(f)]
- 6. The terminal's and the tank truck's vapor collection systems shall be connected during the loading of gasoline. [40 CFR, Part 60.502(g)]
- 7. All equipment associated with the loading facility shall be maintained to be vapor tight. Vapor tight is defined as a concentration of total organic compounds, measured one centimeter from any source, which does not exceed 10,000 ppm (expressed as methane) above background, as determined by EPA Reference Method 21. [Rule 447, Section 304, 40 CFR, Part 60.502(j) and SMAQMD Permits #9265, 9266, and 3074, Condition #3]
- 8. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding

- 4,500 Pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in 40 CFR, \$60.503(d). [40 CFR, Part 60.502(h)]
- 9. No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 Pascals (450 mm of water). [40 CFR, Part 60.502(I)]
- 10. The combined gasoline throughput of all loading racks shall not exceed 2,231,000 gallons/day. [SMAQMD Permits #9265, 9266, and 3074, Condition #4]

MONITORING REQUIREMENTS:

- 11. A result by any of the below listed test methods which shows non-compliance with any provision of the rule shall constitute a violation of the rule. [Rule 447, Section 501]
- A. CONTROL DEVICE: Control efficiency and emission rates of control devices shall be determined by EPA Method 18, 25, 25A, 25B, or California Air Resources Board Test Method 202 or 203.
- B. DIAPHRAGM AIRSPACE: Concentrations in the airspace above vapor diaphragms shall be determined by EPA Test Method 18 or California Air Resources Board Test Method 150, 1-100, or 2-6.
- C. LEAK DETECTION: EPA Reference Method 21 shall be used to determine vapor tight condition.
- D. VAPOR PRESSURE: Vapor pressure may be obtained from standard reference texts or may be determined by ASTM D-2879-83 or ASTM D-323-82.
- E. DETERMINATION OF COMPOUNDS EXEMPT FROM VOC DEFINITION: If any of the perfluorocarbons are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method used to make the determination of these compounds.
- 12. Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for vapor leaks. [40 CFR, Part 60.502(j)]

RECORDKEEPING AND REPORTING REQUIREMENTS:

13. The following record shall be continuously maintained on-site for the most recent five year period and shall be made available to the Air Pollution Control Officer upon request. Yearly record shall be made available for inspection within 30 days following the end of the year. [SMAQMD Permits #9265, 9266, and 3074, Condition #5]

Frequency

Daily

A. Daily records of gasoline throughput. [SMAQMD Permits #9265, 9266, and 3074, Condition #5]

B. Daily records specifying the time periods and mode (normal, bypass, or direct) under which the system operated.

Monthly

Leak inspection records including, as a minimum,

the following information: Date of inspection,

findings (if leaks are found, indicate location, nature and severity), leak determination method (sight, sound, smell, etc.), corrective action, inspector's name and signature. [40 CFR, Part 60.505(c)]

Annually

A.Annual summary of total gasoline throughput. [SMAQMD Permits #9265, 9266, and 3074, Condition #5]

B. Updated tank truck vapor tightness documentation including, as a minimum, the following information: Test title (Gasoline Delivery Tank Pressure Test--EPA Reference Method 27), tank owner and address, tank identification number, testing location, date of test, tester name and signature, witnessing inspector, if any, test results (actual pressure change in 5 minutes). [40 CFR, Part 60.505(b)]

When operating in direct mode

A.Hourly product throughput.[SMAQMD Permit #13121, Condition #21]

B. Number of loading arms used at each of the three loading racks.[SMAQMD Permit #13121, Condition #21] A record of all replacements or additions of components. [40 CFR, Part 60.505(f)]

When replacing or adding components

14. A report including the records described above shall be submitted to the District at least every 6 months. All instances of deviations from permit conditions must be clearly identified in such reports. The reports must be certified by the responsible official consistent with Rule 207, Section 304. [Rule 207, §501.1]

APC Truck Loading - Vapor Collection/Incinerator System:

A. EQUIPMENT DESCRIPTION:

The vapor processing system at this facility (P/O #13121) includes:

- 1) Exhaust system venting three tank truck loading racks (all three modes)
- 2) Organic vapor holding tank, 40,000 cubic feet capacity (normal and bypass modes)
- 3) Organic vapor condensing unit, Edwards, model # DEC-3600 (normal mode)
- 4) Organic vapor thermal oxidizer, John Zink, Model # S76300, 800 cfm capacity (all three modes)

P/O No.: 13121 (for reference purposes only - not federally enforceable)

The system operates under one of the following modes:

- 1) Normal Mode: Vapors from the trucks go to the vapor holding tank, then to the Edwards refrigeration vapor recovery unit. Residual vapors are processed through the thermal oxidizer.
- 2) By-pass Mode: Vapors from trucks go to the vapor holding tank, then to the thermal oxidizer.
- 3) Direct Mode: Vapors from the truck go directly to the thermal oxidizer.
- B. FEDERALLY ENFORCEABLE REQUIREMENTS:

EQUIPMENT DESIGN AND OPERATION REQUIREMENTS:

- 1. SFPP shall not load organic liquids into any tank truck, trailer, or railroad tank car unless the loading facility is equipped with an ARB certified vapor collection and disposal system. [SMAQMD Permit #13121, Condition #5 and Rule 447, Section 301]
- 2. SFPP shall not transfer or permit the transfer of organic liquids into any tank truck, trailer or railroad tank car unless the emissions to the atmosphere do not exceed 0.08 pounds of VOC per one thousand (1,000) gallons of organic liquids transferred as determined by a method specified in condition 16. [SMAQMD Permit #13121, Condition #6 and Rule 447, Section 302]
- 3. Emissions from the vapor processing/disposal system exhaust stream shall not exceed the following limits (based on the maximum daily gasoline throughput of 2,231,000 gal/day). [SMAQMD Permit #13121, Condition #7 and Rule 202, Section 409]

Pollutant	Emission Factor (A)	Maximum Allowable
	(lb VOC/1000 gal)	Emissions (lbs/day)
NMHC	0.08	179
NOx - Normal Mode	0.0334	75
CO - Normal Mode	0.00918	21
NOx - Bypass/Direct Mode	0.0199	45
CO - Bypass/Direct Mode	0.1494	334

- (A). NMHC emission factor based on the emission limit specified by Rule 447. NOx emission factor based on manufacturer's data. CO emission factor based on data from source test conducted on 7/27/93.
- 4. Organic liquids shall be loaded under only one of the following operational conditions: [SMAQMD Permit #13121, Condition #8]
- A. Normal mode the vapors from tank truck loading are stored in the vapor holder, then processed by the vapor condensing unit, with the effluent from the refrigeration unit being treated by the vapor incinerator.
- B. Bypass mode the vapor condensing unit is off-line. Vapors from tank truck loading are sent to the vapor holder. The vapors from the vapor holder are treated by the vapor incinerator.
- C. Direct mode the vapor holder is out of service and the vapor condensing unit is off-line. The vapors from the tank truck loading are processed directly by the vapor incinerator.
- 5. Gasoline throughput shall not exceed 2,231,000 gal/day. [SMAQMD Permit #13121, Condition #9]
- 6. When operating in direct mode gasoline throughput shall not exceed 91,000 gal/hour. [SMAQMD Permit #13121, Condition #10]
- 7. When operating in direct mode the simultaneous use of more than two loading arms at each of the three loading racks is prohibited. [SMAQMD Permit #13121, Condition #11]
- 8. In the event of any partial or total failure of the vapor condensing unit during the normal mode, SFPP shall immediately switch the system to

bypass mode. [SMAQMD Permit #13121, Condition #12]

- 9. In the normal mode the coolant inlet temperature at the vapor condensing unit shall be no warmer than -10 degrees Fahrenheit before each vapor burn period. An alarm on the coolant inlet shall be set at +10 degrees Fahrenheit to indicate a failure of the refrigeration unit. The system shall immediately be switched to bypass mode if the alarm indicates a failure of the refrigeration unit. [SMAQMD Permit #13121, Condition #13]
- 10. A temperature (average over one burning cycle) of not less than 390 degrees Fahrenheit shall be maintained in the thermal oxidizer combustion chamber, as indicated by the temperature probe located approximately 20 feet above ground level, when the thermal oxidizer is in operation. [SMAQMD Permit #13121, Condition #14]
- 11. The vapor holder tank level shall be monitored continuously. The monitor shall alarm at 31 feet and automatically shut down loading racks when the level of 33 feet is reached. [SMAQMD Permit #13121, Condition #15]
- 12. The pressure in the liquid sump between the loading racks and the vapor holder tank shall be monitored and continuously recorded on strip charts. The monitor shall automatically shut down loading racks when the pressure exceeds 6 inches H2O gage. [SMAQMD Permit #13121, Condition #16]
- 13. Process monitors and automatic loading rack shut down safeties for vapor holder tank level and the liquid sump pressure shall be operational at all times. [SMAQMD Permit #13121, Condition #17]
- 14. A pressure relief valve, set at 7.5 inches H2O gage, shall be operational on the vapor holder tank. The pressure relief valve shall not be modified without the approval of the California Air Resources Board executive officer. [SMAQMD Permit #13121, Condition #18]

MONITORING REQUIREMENTS:

15. An emissions test of the vapor processing unit to verify compliance with condition number 15 shall be conducted as follows: [SMAQMD Permit #13121, Condition #19]

Testing frequency
At least once each
calendar year

Operating mode to be tested Most frequently used mode (based on annual throughput in each mode during the previous 12 months)

At least once during the current or previous calendar year

- A. Any operating mode that has been used for more than one continuous hour during either the current calendar year or the previous calendar year; or
- B. Any operating mode that has been used for a cumulative total of more than 24 hours during either the current calendar year or the previous calendar year.

The compliance source test shall be performed in accordance with the following schedule:

- A. Submit a test plan to the air pollution control officer for approval at least 30 days prior to the source test date.
- B. Notify the air pollution control officer at least one week prior to the

actual source test date.

- C. Submit a report of the emissions test to the air pollution control officer within 60 days of completing the test.
- 16. A result by any of the below listed test methods which shows non-compliance with any provision of Rule 447 shall constitute a violation of the rule. [Rule 447, Section 501]
- A. CONTROL DEVICE: Control efficiency and emission rates of control devices shall be determined by EPA Method 18, 25, 25A, 25B, or California Air Resources Board Test Method 202 or 203.
- B. DIAPHRAGM AIRSPACE: Concentrations in the airspace above vapor diaphragms shall be determined by EPA Test Method 18 or California Air Resources Board Test Method 150, 1-100, or 2-6.
- C. LEAK DETECTION: EPA Reference Method 21 shall be used to determine vapor tight condition.
- D. VAPOR PRESSURE: Vapor pressure may be obtained from standard reference texts or may be determined by ASTM D-2879-83 or ASTM D-323-82.
- E. DETERMINATION OF COMPOUNDS EXEMPT FROM VOC DEFINITION: If any of the perfluorocarbons are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method used to make the determination of these compounds.

RECORDKEEPING AND REPORTING REQUIREMENTS:

17. The following record shall be continuously maintained on-site for the most recent five year period and shall be made available to the air pollution control officer upon request. Yearly record shall be made available for inspection within 30 days following the end of the year. [SMAQMD Permit #13121, Condition #21]

Frequency Information to be recorded A. Thermal oxidizer combustion chamber stack Continuously (with a strip chart) temperature. B. Liquid sump pressure. The time periods and mode (normal, bypass, or Daily direct) under which the system operated. When operating on A. Hourly product throughput. direct mode B. Number of loading arms used at each of the three loading racks. A daily record of the inlet temperature to the When operating in normal mode vapor condensing unit.

18. A report summarizing the records described above shall be submitted to the district at least every 6 months. All instances of deviations from permit conditions must be clearly identified in such reports. The reports must be certified by the responsible official consistent with rule 207, section 304. [SMAQMD Permit #13121, Condition #22 and Rule 207, §304]

ATTACHMENT A EMISSIONS CALCULATIONS

ATTACHMENT B LOCAL PERMITS TO OPERATE